

CLAIMS

1. A recording apparatus for recording to a record medium a digital video signal of which a screen is divided into first blocks in a predetermined manner, a luminance signal and two color difference signals of each first block being divided into second blocks corresponding to a chroma format based on the ratio of sampling frequencies of the luminance signal and the two color difference signals, in the digital video signal, the luminance signal and the two color difference signals having been compression-encoded for each second block, the recording apparatus, comprising:

detecting means for detecting a first chroma format that represents the ratio of sampling frequencies of the luminance signal and the two color difference signals of an input digital video signal; and

controlling means for stopping a process for the input digital video signal in a period corresponding to the difference between a predetermined information amount represented by a second chroma format and the information amount represented by the first chroma format when the information amount represented by the first chroma format is smaller than the information amount of the second chroma format corresponding to the first chroma format detected by said detecting means.

2. The recording apparatus as set forth in claim
1,

wherein the input digital video signal is
MPEG encoded data.

5 3. The recording apparatus as set forth in claim
1,

10 wherein in the first chroma format, the ratio
of sampling frequencies of the luminance signal and the
two color difference signals is 4:2:0, and in the
second chroma format, the ratio of sampling frequencies
of the luminance signal and the two color difference
signals is 4:2:2.

15 4. The receiving apparatus as set forth in claim
1,

wherein in the second chroma format, the
ratio of sampling frequencies of the luminance signal
and the two color difference signals is 4:4:4.

20 5. A recording method for recording to a record
medium a digital video signal of which a screen is
divided into first blocks in a predetermined manner, a
luminance signal and two color difference signals of
each first block being divided into second blocks
corresponding to a chroma format based on the ratio of
sampling frequencies of the luminance signal and the
25 two color difference signals, in the digital video
signal, the luminance signal and the two color
difference signals having been compression-encoded for

each second block, the recording method, comprising the steps of:

detecting a first chroma format that represents the ratio of sampling frequencies of the luminance signal and the two color difference signals of an input digital video signal; and

stopping a process for the input digital video signal in a period corresponding to the difference between a predetermined information amount represented by a second chroma format and the information amount represented by the first chroma format when the information amount represented by the first chroma format is smaller than the information amount of the second chroma format corresponding to the first chroma format detected at the detecting step.

6. A reproducing apparatus for reproducing from a record medium a digital video signal of which a screen is divided into first blocks in a predetermined manner, a luminance signal and two color difference signals of each first block being divided into second blocks corresponding to a chroma format based on the ratio of sampling frequencies of the luminance signal and the two color difference signals, in the digital video signal, the luminance signal and the two color difference signals having been compression-encoded for each second block, the reproducing apparatus, comprising:

reproducing means for reproducing the digital video signal recorded on the record medium;

detecting means for detecting a first chroma format that represents the ratio of sampling frequencies of the luminance signal and the two color difference signals of the digital video signal reproduced by said reproducing means; and

controlling means for stopping a process for the reproduced digital video signal in a period corresponding to the difference between a predetermined information amount represented by a second chroma format and the information amount represented by the first chroma format when the information amount represented by the first chroma format is smaller than the information amount of the second chroma format corresponding to the first chroma format detected by said detecting means.

7. The reproducing apparatus as set forth in claim 6,

wherein the input digital video signal is MPEG encoded data.

8. The reproducing apparatus as set forth in claim 6,

wherein in the first chroma format, the ratio of sampling frequencies of the luminance signal and the two color difference signals is 4:2:0, and in the second chroma format, the ratio of sampling frequencies

of the luminance signal and the two color difference signals is 4:2:2.

9. The reproducing apparatus as set forth in claim 6,

5 wherein in the second chroma format, the ratio of sampling frequencies of the luminance signal and the two color difference signals is 4:4:4.

10. A reproducing method for reproducing from a record medium a digital video signal of which a screen is divided into first blocks in a predetermined manner, a luminance signal and two color difference signals of each first block being divided into second blocks corresponding to a chroma format based on the ratio of sampling frequencies of the luminance signal and the two color difference signals, in the digital video signal, the luminance signal and the two color difference signals having been compression-encoded for each second block, the reproducing method, comprising the steps of:

20 reproducing the digital video signal recorded on the record medium;

detecting a first chroma format that represents the ratio of sampling frequencies of the luminance signal and the two color difference signals of the digital video signal reproduced at the reproducing step; and

stopping a process for the reproduced digital

video signal in a period corresponding to the difference between a predetermined information amount represented by a second chroma format and the information amount represented by the first chroma format when the information amount represented by the first chroma format is smaller than the information amount of the second chroma format corresponding to the first chroma format detected at the detecting step.